IN THE CLAIMS

Please replace the presently pending claims with the following amended claims:

1. (Allowed) A disc drive comprising:

a disc rotationally coupled to a chassis;

a movable head suspension assembly having a head coupled thereto movable relative to a surface of the disc;

a transducer supported on the movable head suspension assembly and configured to induce a transducer signal proportional to movement of the head;

a vibration detector configured to detect a transducer signal amplitude above a threshold amplitude and output a level detected signal indicative of head vibration.

2. (Allowed) The disc drive of claim 1 wherein the level detected signal is indicative of head-disc contact.

3. (Allowed) The disc drive of claim 1 wherein the vibration detector includes a frequency filter.

4. (Allowed) The disc drive of claim 3 wherein the frequency filter is configured to detect at least one of a bending mode or torsion mode.

5. (Allowed) The disc drive of claim 1 wherein the transducer is a piezoelectric material.

6. (Allowed) The disc drive of claim 1 wherein the transducer is an electrostatic transducer.

7. (Allowed) The disc drive of claim 1 and further comprising:

a process controller coupled to the detector and configured to receive the outputted

level detected signal and output a process command to reexecute a write command in drive memory.

8. (Allowed) The disc drive of claim 1 and further comprising:

a controller coupled to the transducer on the movable head suspension assembly and configured to transmit a signal to the transducer to move the head.

9. (Allowed) The disc drive of claim 1 wherein the disc drive includes a plurality of discs rotationally coupled to the chassis and a plurality of movable head suspension assemblies having heads coupled thereto to read or write to surfaces of the plurality of discs and including a transducer coupled to each of the plurality of movable head suspension assemblies.

10. (Allowed) The disc drive of claim 19 wherein the transducer is configured to operate between a detection mode and an actuation mode, in the detection mode, the transducer detecting the vibration associated with the head suspension assembly and in the actuation mode the transducer receiving a signal to energize the transducer to move a head of the head suspension assembly.

11. (Allowed) The disc drive of claim 10 including:

a microactuator controller coupled to the transducer and configured to operate the transducer in the actuation mode.

12. (Allowed) A method for operating a disc drive comprising steps of:

(a) providing a transducer supported on a movable head suspension assembly having a head coupled thereto configured to generate a transducer signal indicative of head vibration; and

(b) detecting a signal amplitude of the transducer signal above a threshold amplitude and outputting a level detected signal indicative of the head vibration.

13. (Allowed) The method of claim 12 wherein the transducer is a piezoelectric transducer.

14. (Allowed) The method of claim 12 and further comprising the step of:

(c) transmitting a signal to the transducer on the movable suspension assembly to move the head.

15. (Allowed) The method of claim 12 and further comprising the step of:

(c) transmitting a command to rewrite a write command in drive memory in response to the level detected signal indicative of the head vibration.

16. (Allowed) The method of claim 12 and comprising the step of

(c) filtering the transducer signal to detect vibration frequencies of the head.

17. (Allowed) The method of claim 12 wherein the disc drive includes a plurality of head suspension assemblies and further comprising:

(c) individually detecting the head vibration for each of the plurality of head suspension assemblies.

18. (Allowed) The method of claim 12 including a microactuator controller coupled to the transducer and configured to transmit a signal to the transducer to move the head and comprising the step of:

(c) selectively operating the disc drive in a detection mode and an actuation mode, in the detection mode the transducer detecting the head vibration and in the actuation mode, the transducer moving the head.

19. (Allowed) A drive assembly comprising:

a movable head suspension assembly; and

a detector coupled to a transducer on the movable head suspension assembly that

provides a signal indicative of a vibration associated with the head suspension assembly and the detector outputs a level detected signal that is responsive to the vibration being greater than a threshold value.

20. (Allowed) The method of claim 12 and comprising the step of:

(c) filtering the transducer signal to detect one of bending or torsion mode vibration frequencies.

21. (Allowed) The assembly of claim 19 in which the vibration is caused by head vibration.

22. (Allowed) The assembly of claim 19 wherein the detector includes a filter configured to pass a signal responsive to vibration frequencies associated with the head suspension assembly.

23.(Currently Amended) An assembly comprising:

a movable suspension assembly;

an actuator transducer coupled to the movable suspension assembly; and

a detector coupled to the actuator transducer and configured to receive a signal from the actuator transducer proportional to vibration of the movable suspension assembly.

24. (Currently Amended) The assembly of claim 23 wherein the actuator transducer comprises ~~is~~ one of a piezoelectric or electrostatic actuator.

25. (Currently Amended) The assembly of claim 23 and further comprising:

a controller coupled to the actuator transducer and configured to transmit a signal to the actuator transducer to move the movable suspension assembly.

26. (Currently Amended) The assembly of claim 23 including a controller configured to operate

the actuator transducer between an actuation mode to position a head of the movable suspension assembly and a detection mode to detect vibration of the head of the movable suspension assembly.